RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/573, 262
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RAW SEQUENCE LISTING DATE: 02/23/2007
PATENT APPLICATION: US/10/573,262 TIME: 11:59:27

Input Set : A:\2007-02-19 4600-0119PUS1.ST25.txt

Output Set: N:\CRF4\02232007\J573262.raw

```
3 <110> APPLICANT: KAZUSA DNA RESEARCH INSTITUTE FOUNDATION; Institute for Biomedical
             Research and Innovation
             Hisashi Koqa et al.
     7 <120> TITLE OF INVENTION: NOVEL PLEXIN POLYPEPTIDE, DNA ENCODING THE SAME AND USE
THEREOF
     9 <130> FILE REFERENCE: 4600-0119PUS1
    11 <140> CURRENT APPLICATION NUMBER: US 10/573,262
    12 <141> CURRENT FILING DATE: 2006-03-23
    14 <150> PRIOR APPLICATION NUMBER: JP 2003-371040
    15 <151> PRIOR FILING DATE: 2003-10-30
    17 <150> PRIOR APPLICATION NUMBER: JP 2004-229871
    18 <151> PRIOR FILING DATE: 2004-08-05
    20 <160> NUMBER OF SEQ ID NOS: 24
    22 <170> SOFTWARE: PatentIn version 3.1
    24 <210> SEQ ID NO: 1
    25 <211> LENGTH: 1746
    26 <212> TYPE: PRT
    27 <213> ORGANISM: mouse
    29 <400> SEQUENCE: 1
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    39 Gly Ala Thr Tyr Thr Gly Phe Gly Ser Ala Phe Phe Pro Arg Asn Arg
    43 Ser Leu Glu Asp His Arg Phe Glu Asn Thr Pro Glu Ile Ala Ile Arg
                               55
    47 Ser Leu Asp Ala Arg Gly Asp Leu Ala Lys Leu Phe Thr Phe Asp Leu
                           70
                                               75
    51 Asn Pro Ser Asp Asp Asn Ile Leu Lys Ile Lys Gln Gly Ala Lys Glu
                       85
                                           90
    55 Gln His Lys Leu Gly Phe Val Arg Ala Phe Leu His Pro Ala Val Pro
                                       105
                   100
    59 Pro His Ser Ala Gln Pro Tyr Ala Tyr Leu Ala Leu Asn Ser Glu Ala
    60
                                   120
    63 Arg Ala Gly Asp Lys Asp Ser Gln Ala Arg Ser Leu Leu Ala Arg Ile
                               135
    67 Cys Leu Pro Arg Gly Ala Gly Gly Asp Ala Lys Lys Leu Thr Glu Ser
                           150
                                              155
    71 Tyr Ile Gln Leu Gly Leu Gln Cys Ala Gly Gly Ala Gly Arg Gly Asp
                       165
                                           170
    75 Leu Tyr Ser Arg Leu Val Ser Val Phe Pro Ala Arg Glu Gln Phe Phe
                   180
                                       185
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79 Ala Val Phe Glu Arg Pro Gln Gly Ala Pro Gly Ala Arg Asn Ala Pro

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80		195	_	_ ,		_	200	_		**- 7	~ 1	205	77-	- 1 -	3
83 Ala		Leu	Cys	Ala			Pne	Asp	Asp	vaı		Ата	Ата	тте	Arg
84	210	_				215	-		_		220				
87 Ala	Ala	Arg	Thr	Ala		Phe	Val	Glu	Pro		Pro	Asp	Val	Vai	
38 225				_	230			· •		235		_	~	_	240
91 Val	Leu	Asp	Ser		Val	Gln	Gly	Thr		Pro	Ala	Cys	Glu		Lys
92				245	•				250				_	255	
95 Arg	Asn	Ile		Leu	Gln	Pro	Glu		Leu	Asp	Cys	Gly	Ala	Ala	His
96			260					265					270		
99 Leu	Gln	His	Pro	Leu	Thr	Ile	Leu	Gln	Pro	Leu	Arg	Ala	Ser	Pro	Val
100		275					280					285			
103 Ph	e Arç	, Ala	Pro	Gly	. Leu			a Val	. Aļ	a Val	. Ala	ı Ser	: Ala	Asr	ı Asn
104	290			•		295					300				
107 Ty:	r Thr	: Ala	Val	. Phe	. Leu	Gly	/ Thi	: Ala	t Th	r Gly	/ Arg	J Let	ı Lev	ı Lys	: Ile
108 30					310					315					320
111 Se:	r Leu	ı Asn	Glu	ı Ser	Met	Glr	ı Val	[Va]	. Se	r Arç	J Arg	y Val	Let	t Thr	· Val
112				325					330					335	
115 Ala	а Туг	Gly	glu	ı Pro	val	His	His	va]	. Me	: Glr	ı Phe	e Asp	Pro	Met	Asp
116			340					345					350		
119 Pr	o Gly	/ Tyr	Leu	ı Tyr	: Leu	Met	: Thi	: Sei	Hi	s Glr	ı Met	: Ala	a Arg	y Val	. Lys
120		355	i				360)				365	5		
123 Va	l Ala	a Ala	Сув	s Glu	ı Val	His	s Sei	Thi	Cy:	s Gly	/ Asr	Суя	s Val	. Gly	/ Ala
124	370)				375	5				380)			
127 Al	a Asp	Ala	Туг	Cys	Gly	Tr	Cys	Th:	: Le	ı Glı	ı Thi	Arg	Cys	Thi	Leu
128 38					390					395					400
131 Gl:	n Glr	n Asp	Cys	Thr	Asr	Ser	: Sei	c Glr	ı Pro	o His	s Phe	e Trp	Thr	: Sei	: Ala
132				405	5				41	0				415	5
135 Se:	r Glu	ı Gly	Pro	Ser	Arg	Суя	s Pro	Ala	a Me	t Thi	· Val	Leu	ı Pro	Sei	Glu
136			420)				425	5				430)	
139 Il	e Asp	val	His	arg	, Asp	Туг	Th:	c Gly	r. Me	t Ile	e Lei	ı Glr	ı Ile	e Sei	: Gly
140		435	;				44()				445	5		•
143 Se:	r Leu	ı Pro	Ser	Let	Ser	Gly	/ Met	: Glı	ı Me	t Ala	a Cys	a Asp	туг	Gly	/ Asr
144	450)				455	5				460)			
147 Gl	y Val	L Arg	Thi	. Val	. Ala	Arg	y Val	l Pro	Gl	y Pro	Ala	а Туг	Asp	His	s Glr
148 46	5				470)				475	5				480
151 Il	e Ala	Tyr	Cys	s Asr	ı Lev	ı Leı	ı Pro	Arg	Ala	a Glr	ı Phe	Pro	Ser	: Phe	Pro
152	·	_	_	485					49					495	
155 Al	a Gly	/ Gln	Asp	His	. Val	Thi	c Val	l Glı	ı Me	t Sei	. Val	Arg	y Val	Lys	Gly
156	-		500					505					510		_
159 Hi	s Asr	ı Ile	· Val	l Ser	Ala	Asr	n Phe	e Thi	: Ile	е Туј	Asp	Cys	s Ser	Arc	ılle
160		515					520			•	•	525			
163 Gl	v Glr			Pro	His	Thi	. Ala	a Cvs	Th:	r Sei	Cvs	. Lei	ı Ser	Thi	Glr
164	530		-			535		•			540				
167 Tr			Sei	rrr	Cvs			ı Lei	ı Hi	s Sei	Cvs	va]	l Sei	Ası	ı Glr
168 54		1			550					555					560
171 Se		ı Cvs	Glr	ı Asr			Ası	n Pro	Th			Glr	n Asr	Cys	
172		-1-		565					57					575	
175 Gl:	n Ile	e Leu	Pro			Lei	ı Ala	a Pro			Thi	Glv	, Ġlv		
176			580					585				2	590		
-,0			500	•				20.	•						

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179 Asp Ile Leu Val Pro Leu Thr Lys Ala Thr Phe Phe His Gly Ser Ser 600 595 183 Leu Glu Cys Ser Phe Gly Leu Glu Glu Ser Phe Glu Ala Val Trp Ala 615 620 187 Asn Asn Ser Leu Val Arg Cys Asn Gln Val Val Leu His Thr Thr Gln 635 191 Lys Ser Gln Val Phe Pro Leu Ser Leu Lys Leu Lys Gly Pro Pro Asp 650 645 195 Arg Phe Leu Asp Ser Pro Asn Pro Met Thr Val Val Val Tyr Asn Cys 660 665 199 Ala Met Gly Ser Pro Asp Cys Ser Gln Cys Leu Gly Arg Glu Asp Leu 680 675 203 Gly His Leu Cys Val Trp Asn Asp Gly Cys Arg Leu Arg Gly Pro Leu 695 690 207 Gln Pro Leu Pro Gly Thr Cys Pro Ala Pro Glu Ile Arg Ala Ile Glu 710 715 211 Pro Leu Ser Gly Pro Leu Asp Gly Gly Thr Leu Leu Thr Ile Arg Gly 730 725 215 Arg Asn Leu Gly Arg Arg Leu Ser Asp Val Ala His Gly Val Trp Ile 745 740 219 Gly Ser Val Ala Cys Glu Pro Leu Ala Asp Arg Tyr Thr Val Ser Glu 760 755 223 Glu Ile Val Cys Ala Thr Gly Pro Ala Ala Gly Ala Phe Ser Asp Val 775 227 Val Thr Val Asn Val Ser Lys Glu Gly Arg Ser Arg Glu Gln Phe Ser 795 790 231 Tyr Val Leu Pro Thr Val His Ser Leu Glu Pro Ser Met Gly Pro Lys 805 810 235 Ala Gly Gly Thr Arg Ile Thr Ile His Gly Ser Asp Leu Asn Val Gly 236 825 239 Ser Met Leu Gln Val Leu Val Asn Asp Thr Asp Pro Cys Thr Asp Leu 840 835 243 Thr Arg Thr Ala Thr Ser Ile Thr Cys Thr Val Pro Gly Gly Thr Leu 855 247 Pro Ser Pro Val Pro Val Cys Val Arg Phe Glu Ser Arg Gly Cys Val 870 875 248 865 251 His Gly Asn Leu Thr Phe Trp Tyr Met Gln Asn Pro Val Ile Thr Ala 885 890 255 Ile Ser Pro Gly Arg Ser Pro Val Ser Gly Gly Arg Thr Ile Thr Val 905 900 259 Ala Gly Glu Arg Phe His Met Val Gln Asn Val Ser Met Ala Val His 920 263 His Ile Gly Arg Glu Pro Thr Phe Cys Lys Val Leu Asn Ser Thr Leu 940 935 267 Ile Thr Cys Pro Ser Pro Gly Ala Leu Ser Asn Ala Ser Ala Pro Val 955 950 271 Asp Phe Phe Ile Asn Gly Arg Ala Tyr Ala Asp Glu Ala Ala Glu Glu 965 970 275 Leu Leu Asp Pro Ala Glu Ala Gln Arg Gly Ser Arg Phe Arg Leu Asp RAW SEQUENCE LISTING DATE: 02/23/2007 PATENT APPLICATION: US/10/573,262 TIME: 11:59:27

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276				980				98					990	_	
279	Tyr	Leu I	Pro A	Asn l	Pro (Gln 1	Phe Se	er 1	Chr A	Ala 1	Lys A	arg G	lu I	Lys 1	Trp Ile
280	-		995					000					005		
283	Lys	His	His	Pro	Gly	Glu	Pro	Leu	Thr	Leu	Val	Ile	His	Lys	Glu
284	_	1010			_		1015					1020			
287	Gln	Asp	Ser	Leu	Gly	Leu	Glu	Ser	His	Glu	Tyr	His	Ile	Lys	Ile
288		1025			•		1030				-	1035		_	
	Glv	Gln	Val	Ser	Cys	Asp	Ile	Gln	Ile	Ile	Ser	Asp	Arg	Val	Ile
292	•	1040			•	-	1045					1050	_		
	His	Cvs	Ser	Val	Asn	Glu	Ser	Leu	Gly	Thr	Ala	Glu	Gly	Gln	Leu
296		1055					1060		•			1065	_		
	Pro	Ile	Thr	Ile	Gln	Val	Gly	Asn	Phe	Asn	Gln	Thr	Ile	Ala	Thr
300		1070					1075					1080			
303	Leu	Gln	Leu	Gly	Gly	Ser	Glu	Thr	Ala	Ile	Val	Val	Ser	Ile	Val
304		1085		-	_		1090					1095			
307	Ile	Cys	Ser	Val	Leu	Leu	Leu	Leu	Ser	Val	Val	Ala	Leu	Phe	Val
308		1100					1105					1110			
311	Phe	Cys	Thr	Lys	Ser	Arg	Arg	Ala	Glu	Arg	Tyr	Trp	${\tt Gln}$	Lys	Thr
312		1115		_			1120					1125			
315	Leu	Leu	Gln	Met	Glu	Glu	Met	Glu	Ser	Gln	Ile	Arg	Glu	Glu	Ile
316		1130					1135					1140			
319	Arg	Lys	Gly	Phe	Ala	Glu	Leu	Gln	Thr	Asp	Met	Thr	Asp	Leu	Thr
320		1145					1150					1155			
323	Lys	Glu	Leu	Asn	Arg	Ser	Gln	Gly	Ile	Pro	Phe	Leu	Glu	Tyr	Lys
324		1160					1165					1170			
327	His	Phe	Val	Thr	Arg	Thr	Phe	Phe	Pro	Lys	Cys	Ser	Ser	Leu	\mathtt{Tyr}
328		1175					1180					1185			
331	Glu	Glu	Arg	Tyr	Val	Leu	Pro		Lys	Thr	Leu		Ser	Gln	Gly
332		1190					1195					1200	_		
335	Gly		Pro	Pro	Gln	Glu	Thr		Pro	Leu	Leu	_	Glu	Trp	Asn
336		1205					1210					1215		_	_
	Ile		Glu	His	Cys	Arg	Pro		Met	Glu	Glu	-	Ile	Ser	Leu
340		1220				_	1225				_	1230		_,	
			Ser	Leu	Leu	Asn	Asn	-	His	Phe	Leu		Val	Pne	Val
344		1235	_			~-7	1240		_,			1245	-		
			Leu	Glu	GIn	Gin	Lys	_	Phe	Ala	Val		Asp	Arg	Cys
348		1250		_	_	_	1255			_		1260	_	_	~ 1
	Ser		Ala	Ser	Leu	Leu	Thr	Пе	Ala	Leu	His	_	ьуs	ьeu	GIU
352	_	1265	_,	_	-1.		1270	~ 1	•	.	**- 7	1275	T	T1_	7
	Tyr	-		Ser	шe	мет	Lys		ьeu	ьeu	vaı		ьeu	шe	Asp
356		1280			.		1285		*	34-4-	.	1290	7	mh as	G1
	Ala		Ala	Ala	ьуs	Asn	Pro	ьуѕ	ьeu	мет	Leu		Arg	THE	GIU
360	0	1295	77. T	01.	T	Mot	1300	መኤ~	λ~~	Т~~	Mo+	1305	Tla	C17.C	Mot
	ser		vaı	GIU	ьys	мес	Leu		ASII	тър	met	Ser	тте	Cys	MEC
364	т.	1310	0	T 0	7	~1	1315		C1	C1	Dwa	1320	Dho	Lou	T.eu
	туr	_	cys	ьeu	arg	GIU	Thr	val	GTA	GIU	Pro	Phe	Fue	Leu	neu
368	T	1325	77.	Tla	T	~1	1330	τla	7 ax	Tira	C1	1335	Tlo	7 02	Nla
	ьeu	-		тте	гаг	GIN	Gln		ASII	тÀS	GTÀ	Ser	тте	Asp	Ala
372		1340					1345					1350			

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375 376	Ile	Thr 1355	Gly	Lys	Ala	Arg	Tyr 1360	Thr	Leu	Asn	Glu	Glu 1365	Trp	Leu	Leu
379	Arg	Glu	Asn	Ile	Glu	Ala	Lys	Pro	Arg	Asn	Leu	Asn	Val	Ser	Phe
380		1370	_			_	1375	_	_		. .	1380	1 /- 4	3	m)
383 384	Gln	Gly 1385	Cys	Gly	Met	Asp	Ser 1390	Leu	Ser	Val	Arg	Ala 1395	Met	Asp	Thr
387 388	Asp	Thr 1400	Leu	Thr	Gln d	Val	Lys 1405	Glu	Lys	Ile	Leu	Glu 1410	Ala	Phe	Cys
	Lvs		Val	Pro	Tvr	Ser		Trp	Pro	Ara	Ala	Glu	Asp	Val	Asp
392	-1	1415			- 4 -		1420					1425	-		-
	Leu	Glu	Trp	Phe	Ala	Ser	Ser	Thr	Gln	Ser	Tyr	Val	Leu	Arg	Asp
396		1430	_				1435					1440			
399	Leu	Asp	Asp	Thr	Ser	Val	Val	Glu	Asp	Gly	Arg	Lys	Lys	Leu	Asn
400		1445					1450					1455			
403	Thr	Leu	Ala	His	Tyr	Lys	Ile	Pro	Glu	Gly	Ala	Ser	Leu	Ala	Met
404		1460					1465					1470			
407	Ser	Leu	Thr	Asp	Lys	Lys		Ser	Thr	Leu	Gly	Arg	Val	Lys	Asp
408		1475					1480					1485			_
411	Leu	_	Thr	Glu	Lys	Tyr	Phe	His	Leu	Val	Leu		Thr	Asp	Glu
412		1490					1495				_	1500	_	_	_
	Leu		Glu	Pro	Lys	Lys	Ser	His	Arg	Gln	Ser		Arg	Lys	Lys
416	•	1505	_			_	1510	_,	_		_	1515	m1	•	~1
	Val	Leu	Pro	Glu	Ile	Tyr	Leu	Thr	Arg	Leu	Leu	Ser	Thr	Lys	GIY
420	1	1520	~1		5 1	.	1525		.	Dl	T	1530	T1.	T	0
	Thr	Leu	GIn	ьуs	Pne	ьeu	Asp	Asp	ьeu	Pne	ьys		ше	Leu	ser
424	~ 7.	1535	a 1	7	T	Deca	1540	T 011	7 1-	1707	T	1545	Dho	Phe	7
	шe	1550	GIU	Asp	гаг	PIO	1555	ьеu	Ala	val	пур	Tyr 1560	Pile	PIIE	ASP
428	Dho		Gl 11	Glu	Gln	712	Glu	Tare	Δνα	Glv	71 ₀		Δen	Pro	Δen
432	FIIE	1565	Giu	Gru	GIII	AIA	1570	цуз	ALG	Gry	110	1575	ASP	110	тор
	Thr	Leu	His	Tle	Trn	Lvs	Thr	Asn	Ser	Leu	Pro		Ara	Phe	Trp
436	1111	1580		110		_,_	1585					1590			
	Val	Asn	Ile	Leu	Lvs	Asn		Gln	Phe	Val	Phe	Asp	Ile	Glu	Lys
440		1595			-7		1600					1605			•
			His	Ile	Asp	Ala	Cys	Leu	Ser	Val	Ile	Ala	Gln	Ala	Phe
444		1610			•		1615					1620			
447	Ile	Asp	Ala	Cys	Ser	Ile	Ser	Asp	Leu	Gln	Leu	Gly	Lys	Asp	Ser
448		1625		-			1630	_				1635	_	_	
451	Pro	Thr	Asn	Lys	Leu	Leu	Tyr	Ala	Lys	Glu	Ile	Pro	Glu	Tyr	Arg
452		1640					1645					1650			
455	Lys	Thr	Val	Gln	Arg	Tyr	Tyr	Lys	Gln	Ile	Gln	Asp	Met	Thr	Pro
456		1655	•				1660					1665			
459	Leu	Ser	Glu	Gln	Glu	Met	Asn	Ala	His	Leu	Ala	Glu	Glu	Ser	Arg
460		1670					1675					1680			
463	Lys	Tyr	Gln	Asn	Glu	Phe	Asn	Thr	Asn	Val	Ala	Met	Ala	Glu	Ile
464		1685					1690					1695			
	_	Lys	Tyr	Ala	Lys	Arg	_	Arg	Pro	Gln	Ile	Met	Ala	Ala	Leu
468		1700			_		1705				_	1710			_ *
471	Glu	Ala	Asn	Pro	Thr	Ala	Arg	Arg	Thr	Gln	Leu	Gln	His	Lys	Phe

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